Glossary and Basic Terminology

Principles of Computing

Fall 2024

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B

· bash: The Bourne-Again Shell, the default shell on Linux and the most popular shell program in the world. Based on sh and released in 1989.

\boldsymbol{C}

- · closed-source software: Software whose source code is *not* freely available from the developers.
- · CLI: Command-Line Interface. A method of interacting with an application based around executing text-based commands. Implemented using a REPL. Commonly requires only a keyboard.

\boldsymbol{D}

· directory: A file that contains other files inside of it. One of the two important file types.

F

- · file: TODO
- · fish: A user-friendly shell program.
- folder: See the entry on directories.
- · FOSS: Free and Open-Source Software.
- · free software: Software that is distributed under a license that permits running the software for any purpose, as well as studying, modifying, and redistributing it.
- · freedom-respecting software: See the entry on free software.

G

- · GUI: Graphical User Interface. A method of interacting with an application by using visual symbols, metaphors, gestures, or pointing. Commonly involves the use of a mouse, touchpad, touch screen, or controller.
- · GNU: GNU's Not UNIX. A massive open-source software project founded by Richard Stallman.
- · GNU GPL: The General Public License, a very popular public software license made by Richard Stallman.

Ι

- · IPython: A command-line interface for Python.
- · IDE: Integrated Development Environment. A text editor with features that facilitate software development.

· Jupyter: An open-source software project that extends IPython to the Julia and R programming languages.

\boldsymbol{L}

- · libre software: See the entry on free software.
- · Linux: A large family of open-source, UNIX-like operating systems based on using GNU.

M

· macOS: A UNIX-like operating system developed by Apple and originally called Mac OS X.

0

- · open-source software: Software that is distributed along with the source code that produced the software.
- · 05: Operating System
- · OSS: Open-Source Software.

P

- · POSIX: Portable Operating System Interface
- · Python: An interpreted, dynamically typed programming language

R

- · RAM: Random Access Memory. Where all currently-running processes store their data.
- · recursion: See the entry on recursion.
- · REPL: Read-Evaluate-Print Loop.

S

- · sh: The Bourne shell, precursor to bash and released in 1979.
- shell: A command-line interface for interacting with the OS.
- · stdin: The standard input stream. Used for receiving input from other processes.
- · stderr: The standard error stream. Used specifically for sending error messages to other processes.
- · stdout: The standard output stream. Used for sending messages to other processes.

T

• terminal: An application that invokes and manages a shell.

U

· UNIX: The first portable operating system and the foundation for what would eventually become Linux.

V

- · VSCode: An incredibly popular IDE developed by Microsoft.
- · VSCodium: An open-source version of the popular VSCode IDE with telemetry disabled by default.

W

· Windows: An operating system made by Microsoft.

\boldsymbol{Z}

· zsh: Z shell, the default shell on macOS.